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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,431	08/03/2001	Gene E. Kirila II	13174.7USI1	7423
23552	7590	04/04/2006	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			TSAI, CAROL S W	
			ART UNIT	PAPER NUMBER
			2857	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/922,431

Applicant(s)

KIRILA ET AL.

Examiner

Carol S. Tsai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 4,515,545 to Hinrichs et al. in view of U. S. Patent No. 5,032,525 to Lee et al. and U. S. Patent No. 6,445,969 to Kenney et al.

With regard to claims 1, 10, 19, and 28-33, Hinrichs et al. teach a system for controlling a manufacturing process comprising: a sensor for measuring an operational parameter of the manufacturing process comprising a resin and reinforcement (fig. 4, part 50), a signal generator and transmitter (fig. 4 & col. 9, lines 43-48), a process controller (col. 9, lines 48-54), a process control software associated with the process controller wherein the software adjusts the operational parameters (col. 5, lines 34-40), and a transmitter for sending instructions from the remote Location to the manufacturing locations (col. 5, lines 40+).

Hinrichs et al. do not disclose the transmitter having the ability to change programming of the controller on a real-time basis.

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Lee et al. teach a resin manufacturing process that changes program execution of a controller on a real-time basis to control the cure process (col. 10, line 65 to col. 11, line 6).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hinrichs et al.'s system to include a resin manufacturing process that changes program execution of a controller on a real-time basis to control the cure process, as taught by Lee et al., in order to derive the added benefit of improved efficiency and improved product quality.

Hinrichs et al. do not disclose one or more manufacturing process being controlled remotely.

Kenney et al. teaches a real time process control system for a manufacturing process that controls the process of a plurality of manufacturing, facilities located at the same or different sites remotely (col. 2, lines 12+; col. 27, lines 8-25; and col. 36, lines 28+).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hinrichs et al.'s system to include a real time process control system for a manufacturing process that controls the process of a plurality of manufacturing, facilities located at the same or different sites remotely, as taught by Kenney et al., in order save costs by having just one process controller controlling a plurality of facilities.

As to claims 2, 3, 11, 12, 20, and 21, Hinrichs et al. also disclose a pressure in the manufacturing process being measured (col. 5, lines 5-7).

As to claims 4, 5, 13, 14, 22, and 23, Hinrichs et al. also disclose the parameter of the process comprising a flow rate (col. 2, lines 39-46).

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As to claims 6-8, 15-17, and 24-26, Hinrichs et al. also disclose a temperature in the manufacturing process being measured (fig. 5, lines 1-4).

As to claims 9, 18, and 27, Hinrichs et al. also disclose the parameter comprising a cure or cycle time (fig. 3).

Response to Arguments

4. Applicant's arguments filed February 6, 2006 have been fully considered but they are not persuasive.

Applicants argue that Kenney et al disclose no remote "control" function. because Kenney et al. disclose a method and system, or network, for interconnecting multiple, remotely located, PCB manufacturing sites such that these remotely located processes may be monitored in a coordinated fashion. The Examiner disagrees with Applicants. As set forth above in the art rejection, Kenney et al. do a real time process control system for a manufacturing process that controls the process of a plurality of manufacturing, facilities located at the same or different sites remotely (col. 2, lines 12+; col. 27, lines 8-25; and col. 36, lines 28+; The programmable logic controller 713 is utilized to receive, process and store the data provided by sensing devices 709, 715 and 719 coupled to the various types of processing equipment. The programmable logic controller 713 contains logic function codes for sequentially monitoring input data received from the master module 707 and command structures and protocols for gathering data from the various sensors 709, 715 and 719. The programming codes, structures and protocols contained within the programmable logic controller 713 comprise the intelligence of the SPCIS data

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acquisition system. In one embodiment, the controller 713 receives trigger signals from the various proximity sensors described above and thereafter, initiates the taking of data from respective process machines by transmitting TAKE DATA commands to the various sensors coupled to the process machines. Programmable logic controllers are well-known in the art and are commonly utilized to control and monitor process machinery).

Applicants argue that ability to monitor disclosed by Kenney et al. stands in sharp contrast to the ability to control as featured in claims 1, 10, and 19; specially, claim 1 is directed to "A system for the monitor and control from a remote location of at least one discrete measurable operational parameter of a manufacturing process for manufacturing composite articles at a manufacturing location". The Examiner disagrees with Applicants. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol S. W. Tsai whose telephone number is (571) 272-2224. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571) 272-2216. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll-free).

cswt
March 30, 2006
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CAROL S.W. TSAI
PRIMARY EXAMINER